Internal Revenue Service

Advancing *E-file* Study Phase 1 Report — Executive Summary

Achieving the 80% *E-file* Goal Requires Partnering with Stakeholders on New Approaches to Motivate Paper Filers

September 30, 2008

Version 1.3

Document Number 0206.0209

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1. Introduction

The Internal Revenue Service (IRS) Advancing *E-file* Study Phase 1 Report is a major effort to collect, synthesize, and analyze all substantial data in one document on the IRS *e-file* program — including its history, stakeholders, taxpayer and preparer behaviors, related programs and efforts, and options for expansion — to help the IRS validate and launch future studies, research, and other activities to meet the congressionally set goal of an 80% *e-file* rate. As Phase 1 of a multiphased approach for addressing this goal, this report does not include recommendations on selecting or implementing specific options for advancing *e-file* but lays the foundation for doing so in future phases.

The Electronic Tax Administration (ETA) of the IRS commissioned this report to be prepared by The MITRE Corporation, a not-for-profit organization that operates three Federally Funded Research and Development Centers (FFRDC), one of which — the Center for Enterprise Modernization (CEM) — serves the IRS. In addition to being driven by the IRS's desire to meet the 80% *e-file* goal and to improve taxpayer service overall, the study results from the specific interest of members of Congress and other stakeholders in increasing and improving electronic service for filing tax returns. While the IRS saw a record-high *e-filing* rate of 60% during the 2008 filing season, the remaining gap highlights the need to explore multiple options to reach the 80% *e-file* goal.

To conduct the analysis needed for this foundational first phase, the approach involved two related and overlapping workstreams: (1) identify, obtain, and synthesize existing information on taxpayer and preparer filing behavior and characteristics and (2) identify, obtain, and synthesize existing information on potential options to reach the 80% *e-file* goal. The IRS requested that the report outline be socialized with numerous stakeholder groups internal and external to the IRS. Meetings were held with more than a dozen stakeholders, and more than 500 source documents provided information for the report. All of these are noted in the back matter of the report. Since the intent of this phase was to survey currently available information, no original research was conducted. However, the final Chapter identifies gaps in available information and suggests areas where new research should be considered in future phases.

During this phase, the following themes were identified and merit keeping in mind as the reader progresses through the report:

- **There is no silver bullet.** An advancing *e-file* strategy must take into consideration many complex factors, and there is no quick fix or any single option approach for the IRS to convert remaining paper filers.
- **The IRS cannot meet the goal without help.** The multifaceted landscape of the US tax system, by its very nature, requires that the IRS rely on strong partnerships with third party partners, stakeholders, and Congress to advance *e-file*.
- **Technology is secondary to motivating behavior.** Even the most innovative technology will not help the IRS achieve the 80% *e-file* goal unless it is grounded in a thorough understanding of the intricacies of filer behavior — their motivators, concerns, and relative positions on the technology adoption curve.

2. *E-file* Goal, Stakeholders, and History

There are a number of ways that tax returns can be prepared and filed using paper or electronic means. Figure 2-1 simplifies the complex array of choices into three main combinations of preparation and filing for individual tax returns:

- Prepared on a computer and filed electronically through *e-file*.
- Prepared on a computer, then printed and filed on paper (the IRS calls these types of filers V-Coders).
- Prepared on paper and filed on paper.

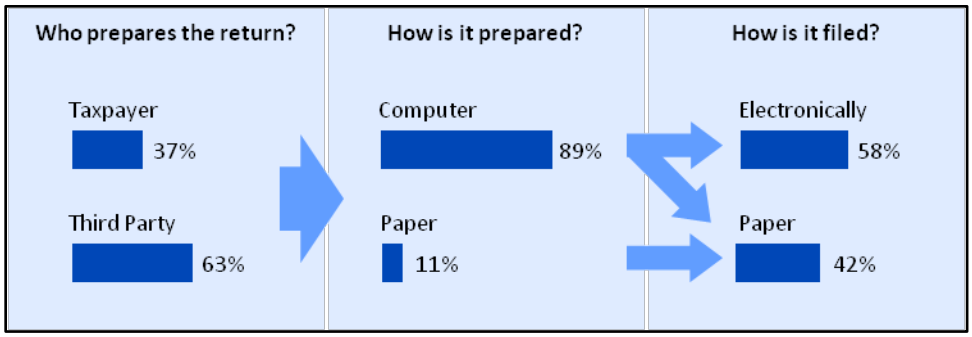

Figure 2-1 Federal Individual Income Tax Preparation and Filing Data (as of TY2006)

The 80% *e-file* goal was established in the Internal Revenue Service Restructuring and Reform Act of 1998 (RRA98) and states:

> Paperless filing should be the preferred and most convenient means of filing Federal tax and information returns, [and] it should be the goal of the Internal Revenue Service to have at least 80 percent of all such returns filed electronically by the year 2007. [1]

The scope of this goal is open to a number of interpretations, including type of return (tax — individual or business — or informational) and ratio of returns (a combined 80% of individual and business returns or 80% of individual returns). Diverse stakeholders, from the Electronic Tax Administration Advisory Committee (ETAAC) to the IRS Oversight Board and others, have varying interpretations. It is worth noting that in 2006, the combined *e-file* rate of information returns and tax returns (for individuals and businesses) was 88%[2]. Consistent with the IRS interpretation of the 80% *e-file* goal, the scope of this report is defined as the electronic filing of Federal individual income tax returns using 1040, 1040A, or 1040EZ and their related schedules.

The IRS *e-file* program for individual and business tax returns began in 1986. During that year, 25,000 refund-only returns were accepted via modem from five third-party transmitters in three locations and processed in the Cincinnati Service Center[3]. Electronic filing has grown substantially since then. In 2008, more than 87 million (about 60%) individual tax returns were received electronically[4].

The current *e-file* platform is designed such that third party involvement is required for the electronic transmission of returns, resulting in third party participation in the process from start (preparation) to finish (filing). Figure 2-2 presents a simplified overview of how *e-file* works and the significance of the third party role. Individual taxpayers or their tax preparers use tax preparation software to prepare State and Federal tax returns. The returns are then submitted electronically to a transmitter. The transmitter then sends the returns to the IRS and/or the appropriate State agency. For States participating in the Federal/State (Fed/State) program, both State and Federal returns are sent to the IRS, which then forwards State returns to the appropriate State tax authority.

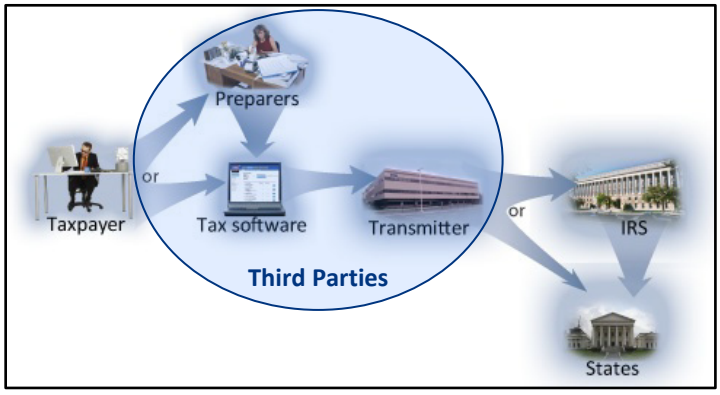

Figure 2-2 Illustration of Roles Performed by Key Stakeholders in Electronically Filing

Current third party involvement in electronic filing is shaped by the fact that the demand for *e-filing* originated in the preparer community and prompted the development of partnerships between the IRS and preparers. The early program consisted of tax returns *e-filed* by a handful of preparers through third party transmitters. Today, most taxpayers rely on a third party — meaning tax return preparation software, a paid preparer, a practitioner, or a community-based partner — to prepare and/or file their taxes. From 2003 to 2005, the use of third parties grew from 76% to 85%[5]. In 2005, 58% of individual tax returns were filed by preparers and 27% were self-prepared using third party tax preparation software[6]. The use of third parties is increasing as the Federal tax code has continued to grow in complexity.

The collaboration of all stakeholders, including the private sector and the States, has played a pivotal role in the substantial progress in *e-filing* rates to date. The IRS needs help to continue progress toward the 80% *e-file* goal. Going forward, strong partnerships and considerable stakeholder engagement will be crucial to advancing *e-file*.

3. IRS *E-file* and Technology Adoption

Because *e-file* is a platform involving the use of multiple technologies — from computers to Internet to software — it is beneficial to evaluate *e-file* acceptance within the framework of technology adoption theory, specifically, the Diffusion of Innovations model by Everett Rogers. Rogers describes the adoption or acceptance of a new product or innovation according to demographic and psychological characteristics of defined adopter groups. The distribution of users against the acceptance rate of new ideas and technologies resembles a classical normal distribution or bell curve. Rogers' model also defines the relationship between increasing adoption and increasing time. After a slow start, there is a period of relatively rapid growth, followed by a cooling off period. This latter period exhibits the principle of diminishing returns — effectively requiring an increasingly greater per-unit investment to get the same payoff in adoption. For the IRS, this means that what has worked to date to increase *e-file* uptake will become increasingly less effective in achieving higher adoption rates in the future.

Figure 3-1 shows the adoption rates for IRS *e-file*[7]. The historical *e-file* adoption rates are consistent with the technology adoption curve. Following the Diffusion of Innovations model, the IRS-projected growth rate for electronic filing is slowing and not projected to reach 80%, even by 2014.

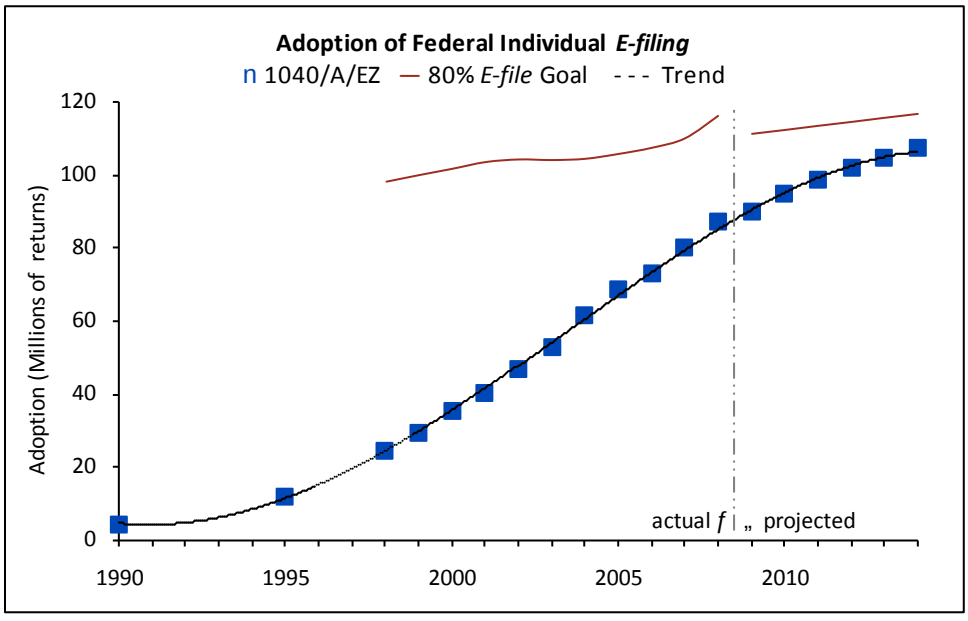

Figure 3-1 Actual and Projected *E-file* Adoption (1990–2014)

Because self-prepared *e-filing* depends on access to a computer and Internet connectivity, it is important to understand adoption trends for personal computers (PC) running any operating system and the Internet at home. The adoption trends for both these technologies in US households also illustrate the classic technology adoption S-

curve. These trends indicate that a significant number of households will not have a computer or Internet access for the foreseeable future, because both technologies show signs of entering the period of diminishing returns. Another useful and related comparison of technology adoption is that of online banking and bill pay. While the adoption rate for online banking is approaching 50%, it too is showing signs of slowing growth. Figure 3-2 overlays the adoption rates for PCs, Internet, *e-filing*, online banking, and online bill pay in US households into a single chart[8]. *E-file* adoption rates fall right in the middle — below PC and Internet (which are adoption-dependent technologies for *e-file*) and above online banking and online bill pay.

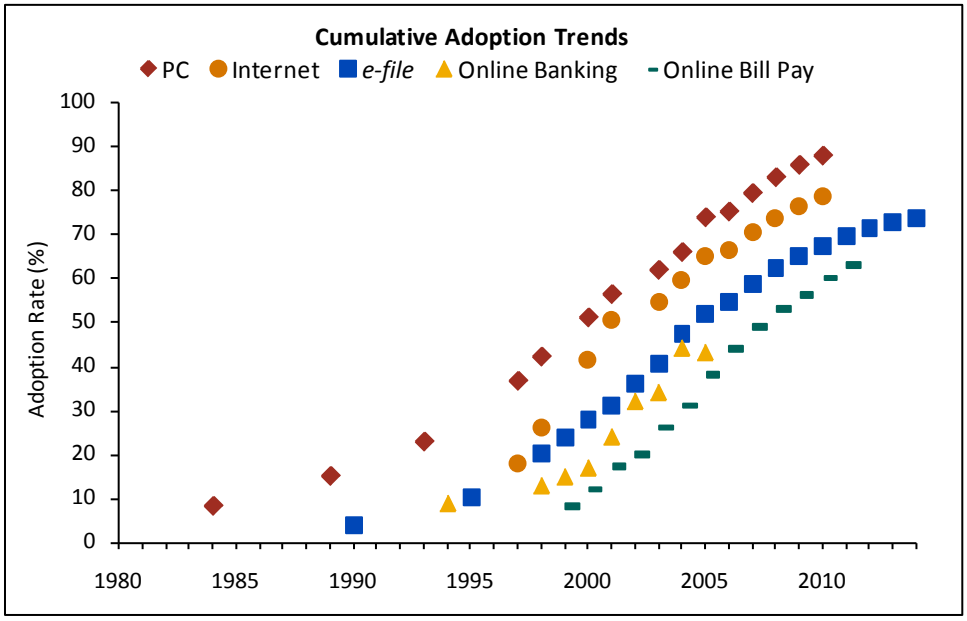

Figure 3-2 Comparison of PC, Internet, *E-file*, Online Banking, and Online Bill Pay Adoption (1984–2014)

All five technologies in Figure 3-2 show an adoption trend consistent with technology adoption theory[9]. Based on this theory, all appear to be near or in the latter half of the adoption cycle, where the cost required to achieve equivalent adoption gains continually increases. This aspect of increasing costs underscores the challenge of expanding *e-file* adoption in the future.

4. Introduction to Research on Filer Motivators and Concerns

The IRS has conducted a great deal of research into the behavior (motivators and concerns) of taxpayers and preparers, including primary research (telephone surveys and focus groups) as well as detailed analyses of IRS data on the flow of returns through the filing season. Table 4-1 describes some of these major research efforts.

Table 4-1 Major IRS Research Efforts on Filer Motivators and Concerns

Title	Description
Taxpayer Assistance Blueprint (TAB)	A major study in two parts, the Taxpayer Assistance Blueprint (TAB) resulted from a July 2005 congressional mandate that the IRS address taxpayer needs and IRS service delivery while ensuring that decisions are informed by research and stakeholder engagement.
Taxpayer Communications Tracking Studies	Launched in 2003–2004 and repeated in 2004–2005, the Taxpayer Communications Tracking Study combined two separate tracking studies used between 1997 and 2003 (Taxpayer *e-file* Ad Tracking Study and an Attitudinal Tracking Study) and evaluated the impact of each new communications program on taxpayer awareness of, and disposition toward, *e-file*.
Taxpayer Attitudinal Tracking Study	In addition to looking at segments such as *e-file* usage, return type, filing behavior, and V-Coders, this study also analyzed taxpayers according to a technology acceptance segmentation.

Title	Description
Taxpayer Satisfaction Studies	These studies are conducted each year to gauge taxpayer satisfaction with various *e-filing* options, IRS instructions, and IRS communications and understand non-user interest in *e-file*.
ETA Full Year Database Analyses	This is an annual nationwide analysis of individual taxpayers conducted by the ETA.
Practitioner Business Impact Studies	The IRS conducted Practitioner Business Impact (PBI) research to examine how *e-file* impacts the practitioner business model. Three PBI studies were conducted before July 2005.
One-on-One *e-file* Research Among Taxpayers and Preparers	In 2003, the IRS conducted a study consisting of 375 in-depth telephone interviews of high opportunity taxpayers and preparers to better understand behaviors, motivators, and concerns.
E-file Practitioner Attitudinal Tracking Study	This study was conducted in 2003 to better understand practitioners who file 100 or more returns per year, what motivates them, and how best to communicate with them as the IRS continues to work toward its 80% *e-file* goal.

5. Taxpayer Motivators and Concerns

E-file adoption is driven — or hindered — by taxpayer motivators and concerns, and the challenge to increasing uptake is psychological and behavioral, rather than technological. Multiple factors influence the decision to *e-file*, including accuracy, cost, ease and convenience, and security and privacy. *E-file* holdouts are generally unconvinced of the marketed and/or studied benefits of *e-file*. Complicating matters is the difficulty in distinguishing perceptions of tax preparation software from those of *e-file* itself. Research-based findings on filer motivators and concerns do not always support popular assumptions.

A better understanding of what motivates or concerns taxpayers can help the IRS and other stakeholders determine how to influence behavior to increase *e-filing*. During this study, the areas shown in Table 5-1 were examined for this purpose.

Table 5-1 Taxpayer Motivators and Concerns

Awareness	Are taxpayers aware of *e-file*?
Availability	Is *e-filing* available to and appropriate for taxpayers?
Accuracy	Is *e-file* perceived to produce an accurate return?
Security and Privacy	Is *e-file* perceived to provide security and privacy?
Ease and Convenience	Is *e-file* perceived to be easy to use?
Cost	What is the cost of *e-filing* and its effect on adoption?
Taxpayer Demand	How does owing a balance or getting a refund affect the perceived need to *e-file*?
Fear of Audit	How does fear of being audited affect *e-filing*?
Recordkeeping and Acknowledgment	How do perceived requirements for recordkeeping affect *e-filing*?
Perceived Benefits	How do taxpayers perceive the benefits of *e-filing*?

6. Preparer Motivators and Concerns

Motivators and concerns also support or impede the adoption of *e-file* among preparers, and it is important to examine and understand these separately from those of taxpayers. Preparers exert significant influence on their clients' decisions about *e-filing*, and taxpayers are increasingly turning to third parties for preparation and filing assistance. Taxpayers trust their preparers to guide their decisions. The IRS explored this "unusually close business relationship" between taxpayers and their income tax return preparers[10]. One of these studies concluded that

"Practitioners command high loyalty and reliance from Individual and Business Taxpayers, and thus offer a strong opportunity for expanding the use of *e-file* — if they perceive *e-file* to be in their and their clients' best interests"[11].

Of the 99% of income tax returns prepared electronically by tax professionals, only 67% are filed electronically[12]. Thus, understanding preparer motivators and concerns is an especially important piece of the strategy for changing behaviors to increase *e-filing*. During this study, the areas shown in Table 6-1 were examined for this purpose.

Table 6-1 Preparer Motivators and Concerns

Awareness	Are preparers aware of *e-file*?
Availability	Is *e-filing* available to and appropriate for preparers?
Accuracy	Is *e-file* perceived to produce an accurate return?
Security and Privacy	Is *e-file* perceived to provide security and privacy?
Ease and Convenience	Is *e-file* perceived to be easy to use?
Cost	What is the cost of *e-filing* and the business model that supports it?
Preparer Influence and Client Demand	How do preparers influence taxpayers to *e-file* and vice versa?
Perceived Benefits	How do preparers perceive the benefits of *e-filing*?

7. State Electronic Filing Experiences

The relationship between the IRS and State tax administrations is complex — balancing the shared objective of increasing electronic filing for individual State and Federal returns with the diversity of each State's context and States' choices about how to best meet that objective. State experiences are important to the IRS advancing *e-file* effort for number of reasons, including the following:

- Approaches tried by the States serve to inform the discussion on electronic filing and may provide lessons learned for the IRS's *e-file* expansion efforts.
- The IRS's strategy for increasing *e-filing* rates may affect State efforts.
- State choices about increasing State electronic filing likewise affect progress toward the IRS 80% *e-file* goal.

Given the variability among States regarding their tax systems, it is not surprising that they have tried a wide range of electronic filing methods and met with varying degrees of success. On the whole, States have employed a range of *e-filing* options on par with the ones being explored by the IRS. Preparer-filed returns represent the largest percentage of *e-filed* returns for States overall. According to the Federation of Tax Administrators (FTA), "each of the forty-one States with a broad-based income tax and the District of Columbia [42 total] provide one or more avenues for the [electronic] filing of individual income tax returns"[13]. The FTA categorizes and describes State electronic filing programs/approaches for electronic filing as shown in Table 7-1, which also includes data on filing methods for State returns (taken as a whole) from 2005[14]. Note that for overall State returns, 43.9% were filed on paper, while the rest of the returns, 56.1%, were filed electronically according to the methods described in the table.

Table 7-1 State Approaches to Electronic Filing (as of 2005)

Approach	Description	% of All State Returns
Preparer Filing Though Fed/State Program	Third party files both Federal and State returns with the IRS in a single transmission. The IRS separates State information and makes it available for downloading by the state.	35.5% (Includes Fed/State and Direct Filing Combined)
Preparer Filing with the State	Third party files by two separate transmissions — Federal return to the IRS and State return directly to the State.	
Online Filing Programs	Program for electronic filing of returns by individual taxpayers using personal computers and approved commercial software routed through transmitters. The path through which returns are transmitted depends on the State's participation in the Fed/State or Direct File program.	8.3%
Telefile Programs	State-operated, independent Telefile programs in which the individual taxpayer enters return information using a touch-tone telephone.	1.8%
Direct Internet Filing (I-File) Programs	State programs that allow individual taxpayers to file State income tax returns directly with the State through a State-developed and administered web site.	1.9%
2D Barcode Programs	State programs that allow computer-produced returns that are filed on paper where the return data is captured and printed in a machine-readable 2-dimensional (2D) barcode.	8.6%
State Mandates	State programs in which certain preparers are required to electronically file the returns they prepare. [a]	N/A
Total [b]		47.5%

Notes: (a) Program details, including preparer thresholds, vary by State. (b) Excludes use of 2D barcodes because this is not an electronic filing method, though it is a means of automating the processing of paper returns.

The technology adoption theory also applies to State electronic filing usage. The growth trend for State electronic filing is slowing down, which is "not necessarily unexpected, given the maturation of the programs and the fact that most early filers are already electronic filers"[15]. According to the FTA, for all types of returns, the growth rate for 2006 was an estimated 7.7% (Telefile returns dropped by half and other forms of State electronic filing were up only 10%, compared with 15% in 2005 and more than 20% in previous years)[16].

8. International Electronic Filing Experiences

The methods used by foreign countries for the electronic filing of individual income tax returns provides another avenue for the IRS to explore lessons learned, consider new ideas and approaches to electronic filing, and compare the US experience with electronic filing with those in other countries. While foreign countries have employed a range of methods on par with, and some beyond the scope of, those explored by the IRS for *e-filing* Federal returns, there is no single approach that by itself stands out as a paradigm of electronic filing success. It is also important to note the variability among the countries, not only in terms of tax systems, but also in terms of legal systems, third party models, technology infrastructures, population sizes, cultures, and other demographic factors. Overall, two common, interrelated trends emerge among countries adopting electronic filing: (1) an effort to simplify tax preparation and filing and (2) a focus on making more tax-related information, including tax account information, available online.

This study provides a high-level overview of the methods used in 20 countries and progresses to a more detailed look at each of three countries commonly compared with the United States: the United Kingdom, Canada, and Australia. Discussions of these countries focus on tax systems, filing options and features, electronic filing history and adoption, and the role of third parties. Factors of comparison among the United States, United Kingdom, Canada, and Australia include electronic filing adoption, Internet adoption, and tax system complexity (including the role of third party preparers). The individual electronic filing adoption rates of these countries are summarized in Table 8-1.

Table 8-1 Summary of Individual Electronic Filing Adoption by Selected Country

Country	Total Returns	2003	2004	2005	2006	2006 %
United States[17]	134,421,400 [a]	52,869,000	61,428,300	68,463,900	73,239,500	54.5%
United Kingdom[18]	9,000,000 [b]	700,000	1,100,100	2,000,000	2,895,482	36%
Canada[19]	23,606,102 [c]	9,940,000	11,180,000	12,050,200	12,650,000	54.7%
Australia[20]	11,500,000 [d]	8,633,000	9,000,000	8,900,000	9,100,000	80% [e]

Notes: (a) Data as of 2006. (b) Data as of 2007; approximation. (c) Data as of 2007. (d) Data as of 2005. Australia electronic filing statistics combine Electronic Lodgement System (ELS) and e-Tax adoption; ELS contributions: 7,800,000 in 2003, 7,900,000 in 2004, 7,500,000 estimated in 2005, 7,500,000 estimated in 2006. (e) Includes all electronic filings.

As previously mentioned, Internet usage is also an enabler of electronic filing adoption. Examining Internet usage within each of these countries demonstrates that the United States is in line with or exceeds the usage rates of these countries. Also, similar to the United States, a significant number of taxpayers in each of these countries rely on the assistance of third parties to help them meet their tax obligations.

9. Introduction to Option Chapters

Having covered the history of *e-file*, its stakeholders, taxpayer and preparer behaviors, and related programs and efforts, the report then focuses on potential options the IRS may choose to advance *e-file*. The first two sets of options discuss opportunities tied directly to individual and paid preparer behaviors and motivators, while the last three sets focus on technology-driven options. The first and second technology-based options directly influence *e-filing*, while the last — paper-based filing options — does not directly affect the *e-file* rate but may result in increased efficiencies comparable to those achieved by *e-file*. Addressing paper return processing is an important consideration closely tied to the 80% *e-file* goal given that once that target is reached, 20% of returns will still be filed on paper. As noted earlier, the report does not offer detailed analysis on factors such as cost/benefit, security, and other risks, which will be crucial for the IRS to fully explore before making decisions about any particular option. Table 9-1 lists the options discussed in the remaining Chapters of the report.

Table 9-1 Summary of Options

Chapter	Description of Option Categories
Behavior and Motivation Focus	
10. Incentive-Based *E-filing* Options	Incentives include strategies for increasing *e-file* participation by encouraging voluntary adoption through monetary enticement or enticements that offer other real or perceived benefits.
11. Mandate-Based *E-filing* Options	Federal mandates for *e-filing* require a specified group of preparers to file individual tax returns electronically.
Technology Focus	
12. Internet-Based *E-filing* Options	Internet-based options focus on using the Internet as the approach to increase *e-filing*. Although these options are based on technology, their more substantive implications are operational and political.
13. Phone-Based *E-filing* Options	Phone-based options provide a means for taxpayers, especially those without access to computers or the Internet, to file electronically using landline or mobile phone capabilities.
Efficiency Focus (non–e-file)	
14. Paper-Based Filing Options	While not actually *e-filing*, paper-based options provide the means to automate paper return processing to achieve the efficiency and cost-saving outcomes typically associated with *e-filing*.

10. Incentive-Based *E-filing* Options

Effective incentives focus on people's perceptions and motivations around the choice of how to file a tax return. Incentives can take many forms and can be implemented in a variety of ways. Incentive-based *e-filing* options are divided into two categories — those in the form of tax credits and monetary enticement and those that offer real or perceived benefits to taxpayers and preparers (e.g., valued-added features of *e-file*).

Background

Since the launch of electronic filing, the IRS and some third party partners have offered a range of incentives, both monetary and benefit-based. While RRA98 allows for both types of incentives, few examples of proposals for monetary incentives were found. Benefit-based incentives include those that provide value-added services such as a faster refund and an acknowledgment from the IRS that it has accepted one's tax return. Table 10-1 summarizes incentive-based *e-filing* options.

Table 10-1 Summary of Incentive Options

Option	Targeted Population/Potential *E-file* Contribution
Incentive Option 1: Direct Monetary Incentives Direct monetary reward (e.g., cash, tax credit) for filing electronically.	Targets taxpayers and preparers who do not file electronically and are motivated by cash.
Incentive Option 2: Targeted Marketing of *E-file* Focused marketing efforts toward taxpayers and preparers who continue to file on paper.	Targets taxpayers and preparers who do not file electronically for reasons that can be addressed through awareness and education.
Incentive Option 3: Increased Marketing for Free File Retain current Free File program (no changes in eligibility) but increase and focus marketing.	A theoretical target of about 95 million individuals, which likely will be considerably reduced by realistic expectations of the targeted self-prepared paper filers.
Incentive Option 4: Expand the Free File Program Expand current Free File program by increasing the pool of eligible taxpayers.	As mentioned in Incentive Option 3, actual contribution to the 80% *e-file* goal is more likely to be a subset of the eligible population, no matter how eligibility is defined.
Incentive Option 5: Develop New Benefits Consider new benefits and incentives to convert *e-file* holdouts, such as extending the payment deadline for *e-filers* beyond April 15.	In 2006, approximately 19.5 million paper filers (14%) owed a balance, representing a group that might be persuaded to switch to *e-file* to hold on to its money longer.

Identified Themes

- Effective incentives address perceptions and motivations around the choice of how to file a tax return and are tied directly to taxpayer and preparer behaviors and motivations, rather than to a specific technology.
- Incentives that have succeeded in the past may not be as attractive to taxpayers and preparers who have not yet converted to *e-filing*. New or different incentives may be required to convert *e-file* holdouts.
- The benefit of any given incentive can be relatively subjective; therefore, it may be difficult to quantify its contribution to the 80% e-file goal. More research may be needed in this area.

11. Mandate-Based *E-filing* Options

Mandates for electronic filing require specified groups of taxpayers and/or preparers to file certain tax returns electronically. Mandates typically focus on businesses and organizations (business returns) and preparers of individual returns who file more than a specified number of tax returns, rather than on individual taxpayers. For the purposes of this report, a mandate refers to requiring certain paid preparers to file individual returns electronically.

Background

Currently, Federal law prohibits the IRS from requiring electronic filing of income tax returns for individuals, estates, and trusts[21]. Federal mandates on other kinds of returns are permissible, and some mandates are currently in place for business and tax-exempt organization income tax returns as well as some information returns. Congress must pass legislation for the IRS to pursue the option of mandates for individual returns.

Unlike the IRS, States are not restricted in their authority to mandate that individual State tax returns be filed electronically. As of May 2008, at least 18 States have imposed mandates on a select population of preparers who file individual State tax returns; two States have a mandate on software developers (rather than on preparers) to output electronic or 2D barcoded returns[22]. Experience in the States suggests that the assumed burden on third parties is minimized or mitigated through good communication and collaboration between the tax authority and the preparer community. Table 11-1 summarizes mandate-based *e-filing* options.

Table 11-1 Summary of Mandate Options

Option	Targeted Population/Potential *E-file* Contribution
Mandate Option 1: Federal Mandate on Paid Preparers Establish a Federal mandate with a description of applicable features and thresholds (e.g., only paid preparers that meet a threshold for a certain number of returns filed in a year).	Targets paid preparers who do not yet file electronically; the actual contribution to the 80% *e-file* goal will be determined by the threshold data set (e.g., using 2005 data, a threshold of more than 50 returns produces an increase of 18%; a threshold of more than 200 returns produces an increase of 14%).

Identified Themes

- A Federal mandate on preparers to *e-file* individual returns increases *e-file* volumes with minimal taxpayer burden, although the extent of the increase depends on how the mandate is designed.
- State experiences with mandates help frame the discussion for Federal options. In addition to providing examples of how mandates might work at the Federal level, the IRS/State relationship is also important for these reasons:
  - State mandates affect Federal *e-file* volumes.
  - A Federal mandate could affect State electronic filing efforts.
- Successful mandates require a focus on strong partner relationships.

12. Internet-Based *E-filing* Options

The following options are opportunities to use Internet technology as a channel to advance *e-file*. The options do not necessarily introduce new technical solutions, but their implementation may result in new *e-file* service roles for the IRS or its third party counterparts. While these options are technical in nature, at their core, they are driven by behavior and motivators and their more substantive implications are political and operational (i.e., who owns which pieces of the process).

Options in this category may raise broader philosophical policy questions about the meaning of "good government" and its role and responsibilities to citizens — that is, how far must government go in helping citizens meet their tax obligations? While not attempting to answer such questions, this report does recognize these concerns as potential drivers.

Background

The electronic filing of individual returns is part of the IRS *e-file* program. The current IRS system for receiving electronically filed returns from Electronic Return Originators (ERO) via transmitters is called the Electronic Management System (EMS). Business returns are handled through a separate system called Modernized e-File (MeF). The IRS recently announced plans to incrementally release 1040 forms on MeF starting in 2009. As seen in other option areas, the IRS may look to State experiences for insights. Table 12-1 summarizes Internet-based *e-filing* options.

Table 12-1 Summary of Internet Options

Option	Targeted Population/Potential *E-file* Contribution
Internet Option 1: Enhance IRS Systems Continue to maintain EMS while preparing an incremental release of 1040 forms on the MeF system to provide enhanced *e-file* features.	Targets only the preparer community because MeF is only available to registered preparers; primarily targets preparers who never or only sometimes *e-file* due in part to restrictions in the number of forms supported by *e-file*.
Internet Option 2: Direct Filing Enhance current Internet *e-filing* capability (or MeF) to handle direct user interaction for individual taxpayers and preparers; the use of third party transmitters would continue to be an option.	Targets taxpayers and preparers who do not currently *e-file* but use a computer/tax return preparation software to prepare tax returns (V-Coders); such returns constitute approximately 38 million returns or 30% of all returns filed.
Internet Option 3a: IRS-Provided Form-Based Preparation Tool Expand taxpayer preparation methods to include IRS-provided tools such as fillable PDF forms (i.e., templates) or web-based forms that can be directly transmitted to the IRS.	Targets individuals who are comfortable using forms and do not need the additional assistance of an interactive interface (guided interview), including those who handwrite or type their returns on paper forms and V-Coders who currently use IRS fill-and-print forms.
Internet Option 3b: IRS-Provided Interview-Based Preparation Tool Expand taxpayer preparation methods to include IRS-provided tools such as an interactive application for taxpayers to prepare and transmit their returns directly to the IRS.	Targets taxpayers and preparers who do not currently *e-file* but use a computer/tax return preparation software to prepare tax returns (V-Coders); such returns constitute approximately 38 million returns or 30% of all returns filed. In this case, the cost objection is related to the preparation fee, not just the *e-file* fee.

Identified Themes

- While these options have some impact on technology, their more substantive implications are political and operational. Two of the three options require a major shift in the third party model, transferring ownership of pieces of the current *e-file* program from third parties to the Federal government.
- Estimating the number of filers who might migrate to these options is challenging and requires consideration of a number of complex factors in addition to cost to the taxpayer.
- Determining these options' potential contributions to the 80% *e-file* goal requires understanding whether the options will attract paper filers or merely shift current *e-filer*s to a new method.

13. Phone-Based *E-filing* Options

Phone-based *e-filing* is considered another channel (besides the Internet) for *e-filing*. Given their more limited capabilities compared with a computer with Internet access, phones (landline and mobile) more readily address the filing needs of taxpayers with relatively simple returns. Although taxpayers without computers or an Internet connection at home may be able to access these at other locations (public libraries, work) or take advantage of Taxpayer Assistance Centers or Volunteer Income Tax Assistance (VITA) facilities, these options have a number of limitations, as pointed out by the Treasury Inspector General for Tax Administration (TIGTA) and others[23]. Furthermore, for this population — taxpayers whose returns are by definition simple — the convenience of completing the few lines of a Form 1040EZ and mailing the returns from home may outweigh the potential benefits of filing electronically from a less accessible location.

While a substantial portion of the US population does not and will not have access to a PC and the Internet in the home, this same population is more likely to have mobile phones. The Pew Internet & American Life Project found that "Cell phone users are more likely to be found in groups that have generally lagged in Internet adoption, such as senior citizens, blacks, and Latinos"[24]. Low Internet use, coupled with high mobile phone uptake, makes these populations important targets for potential new phone filing options.

Background

Between 1997 and 2005, the IRS ran the telephone-based *e-filing* program Telefile, which allowed a set of pre-qualified 1040EZ filers to file by phone[25]. Telefile served between 3.3 million and 6 million taxpayers and accounted for about 3% of the *e-filing* rate. TIGTA estimated that the percentage of Telefile users who reverted to paper filing due to the termination of Telefile resulted in a loss in the *e-filing* rate of approximately 1% to 2%[26]. The IRS cited cost and low usage in terminating Telefile, a decision that was criticized by oversight bodies.

According to TIGTA, 31 States had Telefile programs in 2005. Nine States eliminated their programs prior to the Federal Telefile discontinuation, and 12 more discontinued their programs after the Federal Telefile program was terminated. Several of these States cited the Federal Telefile discontinuation as a factor in closing their Telefile programs. Most of the States that participated in the joint Fed/State Telefile program discontinued support for Telefile when the IRS program was discontinued.[27]

As of May 2008, only eight States operated a Telefile program, and only three of those programs — the ones operated in Massachusetts, Ohio, and Pennsylvania — were considered by the FTA to be "significant"[28]. Table 13-1 summarizes phone-based *e-filing* options.

Table 13-1 Summary of Phone Options

Option	Targeted Population/Potential *E-file* Contribution
Phone Option 1: Rethink Phone *E-filing* Evaluate current and cutting-edge phone technology and conduct research on usage trends and the behavior of various target populations for phone-based *e-filing*.	The contribution to the 80% *e-file* goal depends on the scope and eligibility requirements of any phone-based program. Among the key targets are paper filers who have access to a landline or mobile phone but do not have access to a computer.

Identified Themes

- The IRS experience with the cost-effectiveness of Telefile highlights the importance of providing a broad group of taxpayers with a phone-based e-filing option.
- As a result of changes in demographics, user behavior, and technology, phone-based *e-filing* opportunities currently exist that did not during the original development of IRS Telefile.
- More research is required to explore ways to use mobile phone technology (e.g., text messaging) to file taxes.

14. Paper-Based Filing Options

Addressing paper return processing is an important consideration closely tied to the 80% *e-file* goal given that reaching the goal will leave 20% of returns still filed on paper. With paper returns continuing to be a significant percentage of individual taxpayer returns, reliance on costly legacy transcription operations to process these returns is detrimental to the efficiency associated with *e-filing*. Ongoing legacy paper return processing imposes a $67 million annual lost-opportunity cost on the IRS[29]. It is 87% less expensive per return to process electronic returns ($0.35 per return) than paper returns ($2.87 per return)[30]. Even as the IRS approaches the 80% *e-file* goal, it will need to address the significant number of paper returns expected for the foreseeable future. The following options present ways to automate paper return processing to realize efficiencies.

Background

Even if the IRS meets the 80% *e-file* goal in 2014, it can expect to receive nearly 30 million returns on paper that year. The IRS has proposed several paper processing automation projects and continues to pursue modernization of its submission processing. For example, Modernized Submission Processing (Msp) is planned to use both character recognition and 2D barcodes to cut transcription costs, reduce error rates, and improve return availability (i.e., search and retrieval from archives). Because of its significant cost savings, Msp would provide full return on investment in one year. Table 14-1 summarizes paper-based filing options.

Table 14-1 Summary of Paper-Based Filing Options

Paper-Based Filing Options	Targeted Population/Potential *E-file* Contribution
Paper Option 1: 2D Barcodes Implement 2D barcodes through: *Fill-and-print forms* — The IRS updates the 1040 family of forms on IRS.gov to include 2D barcodes when printed. *Tax return preparation software* — The return preparation software vendor community updates its products to allow for this capability on IRS forms.	Because the filing of machine-friendly paper returns is not considered *e-filing*, this option does not directly contribute to the 80% *e-file* goal. However, there are significant cost savings and efficiency benefits from automating the extraction of data from paper tax returns.
Paper Option 2: Character Recognition Implement return imaging and character recognition capability. Similar to the approach planned for the IRS Msp project (note Msp also reads 2D barcodes).	Because the filing of machine-friendly paper returns is not considered *e-filing*, this option does not directly contribute to the 80% *e-file* goal. However, there are significant cost savings and efficiency benefits from automating the extraction of data from paper tax returns.

Identified Themes

- The IRS will need to process a vast number of paper returns for the foreseeable future, even after it achieves the 80% *e-file* goal.
- Relatively mature technologies exist to automate paper processing, and the IRS has begun to plan an automated paper processing solution, pending funding.
- 2D barcodes only work for V-Coded returns and impose a greater stakeholder burden than Character Recognition, which works for all paper returns with no stakeholder burden.

15. Other Options and Research Gaps

This report represents the first step toward defining a comprehensive strategy and set of actions to achieve the 80% *e-file* goal. While the scope of this phase of the study was limited to a synthesis of information from existing documents, reports, and studies and an assessment of the implications of potential *e-filing* options, opportunities for additional research for future phases have been identified and described.

Furthermore, two additional option categories, which are not addressed in this report due to scope and time limitations, were identified: (1) new government-provided incentives, which could be provided by the IRS or the Federal government to entice *e-file* holdouts to switch to electronic filing; and (2) third party–provided incentives/products that do the same. These too should be assessed in subsequent phases of this effort.

The opportunities for additional study and, in some cases, original research, which are described in Table 15-1, were noted during the course of preparing this report. These research opportunities are based on noted gaps in current literature and/or logical next steps to better understand a particular topic. The first research opportunity speaks to general taxpayer and preparer motivators and concerns, while the remaining three opportunities speak to research on refining the target populations and their estimated contributions to the 80% *e-file* goal, related State and international experiences, and analysis of option-specific considerations.

Table 15-1 Opportunities for Additional Research

Study Taxpayer and Preparer Motivators and Concerns	One of the key themes identified in the Phase 1 report is that understanding taxpayer and preparer motivators and concerns — especially those of late adopters in the technology adoption curve — is critical to meeting the 80% *e-file* goal. Additional research, including surveying and interviewing taxpayers, is needed in this area to enable the IRS to focus on expanding *e-file*.
Refine Target Populations for Options	Subsequent phases of the advancing *e-file* effort will require research to refine the target population for any given option. For many of the options, the Phase 1 report provides narrative-based formulas for identifying their target populations; to the fullest extent possible, these formulas will need to be changed to calculate the options' actual contributions to the *e-file* 80% goal. These calculations have not been performed to date, because additional research is needed to identify necessary data.
Study State and International Experiences	Subsequent research will need to consider State and international experiences and their relevance to the Federal arena in greater depth.
Study Option-Specific Considerations	A thorough cost-benefit and systems engineering analysis for each of the options will need to be conducted in subsequent phases of this study.

Conducting additional research will provide a more complete set of facts and data necessary for developing a detailed strategy for meeting the 80% *e-file* goal. Identifying other research needs and prioritizing research opportunities is a first step toward planning the next phase of the advancing *e-file* effort. Recommendations on scoping additional phases of this effort will occur during subsequent phases.

Endnotes

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END OF EXECUTIVE SUMMARY.